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<110>   Bates, Elizabeth
        Fournier, Nathalie
        Chalus, Lionel
        Garrone, Pierre

<120>   MONOCYTE-DERIVED NUCLEIC ACIDS AND RELATED COMPOSITIONS AND
        METHODS

<130>   SF0977XB

<140>   US 10/780,043
<141>   2004-02-17

<150>   US 09/869,388
<151>   1999-12-29

<150>   US 09/223,919
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tggtctcccc gtcccctgga gaagaacaag gcc atg ggt cgg ccc ctg ctg ctg     174
                                 Met Gly Arg Pro Leu Leu Leu
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ccc cta ctg ccc ctg ctg ctg ccg cca gca ttt ctg cag cct agt ggc     222
Pro Leu Leu Pro Leu Leu Leu Pro Pro Ala Phe Leu Gln Pro Ser Gly
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tcc aca gga tct ggt cca agc tac ctt tat ggg gtc act caa cca aaa     270
Ser Thr Gly Ser Gly Pro Ser Tyr Leu Tyr Gly Val Thr Gln Pro Lys
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cac ctc tca gcc tcc atg ggt ggc tct gtg gaa atc ccc ttc tcc ttc     318
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tat tac ccc tgg gag tta gcc aca gct ccc gac gtg aga ata tcc tgg      366
Tyr Tyr Pro Trp Glu Leu Ala Thr Ala Pro Asp Val Arg Ile Ser Trp
            40              45              50

aga cgg ggc cac ttc cac ggg cag tcc ttc tac agc aca agg ccg cct      414
Arg Arg Gly His Phe His Gly Gln Ser Phe Tyr Ser Thr Arg Pro Pro
            55              60              65

tcc att cac aag gat tat gtg aac cgg ctc ttt ctg aac tgg aca gag      462
Ser Ile His Lys Asp Tyr Val Asn Arg Leu Phe Leu Asn Trp Thr Glu
        70              75              80

ggt cag aag agc ggc ttc ctc agg atc tcc aac ctg cag aag cag gac      510
Gly Gln Lys Ser Gly Phe Leu Arg Ile Ser Asn Leu Gln Lys Gln Asp
85              90              95             100

cag tct gtg tat ttc tgc cga gtt gag ctg gac aca cgg agc tca ggg      558
Gln Ser Val Tyr Phe Cys Arg Val Glu Leu Asp Thr Arg Ser Ser Gly
                105             110             115

agg cag cag tgg cag tcc atc gag ggg acc aaa ctc tcc atc acc cag      606
Arg Gln Gln Trp Gln Ser Ile Glu Gly Thr Lys Leu Ser Ile Thr Gln
            120             125             130

gct gtc acg acc acc acc cag agg ccc agc agc atg act acc acc tgg      654
Ala Val Thr Thr Thr Thr Gln Arg Pro Ser Ser Met Thr Thr Thr Trp
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agg ctc agt agc aca acc acc aca acc ggc ctc agg gtc aca cag ggc      702
Arg Leu Ser Ser Thr Thr Thr Thr Gly Leu Arg Val Thr Gln Gly
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aaa cga cgc tca gac tct tgg cac ata agt ctg gag act gct gtg ggg      750
Lys Arg Arg Ser Asp Ser Trp His Ile Ser Leu Glu Thr Ala Val Gly
165             170             175             180

gtg gca gtg gct gtc act gtg ctc gga atc atg att ttg gga ctg atc      798
Val Ala Val Ala Val Thr Val Leu Gly Ile Met Ile Leu Gly Leu Ile
            185             190             195

tgc ctc ctc agg tgg agg aga agg aaa ggt cag cag cgg act aaa gcc      846
Cys Leu Leu Arg Trp Arg Arg Arg Lys Gly Gln Gln Arg Thr Lys Ala
            200             205             210

aca acc cca gcc agg gaa ccc ttc caa aac aca gag gag cca tat gag      894
Thr Thr Pro Ala Arg Glu Pro Phe Gln Asn Thr Glu Glu Pro Tyr Glu
            215             220             225

aat atc agg aat gaa gga caa aat aca gat ccc aag cta aat ccc aag      942
Asn Ile Arg Asn Glu Gly Gln Asn Thr Asp Pro Lys Leu Asn Pro Lys
        230             235             240

gat gac ggc atc gta tat gct tcc ctt gcc ctc tcc agc tcc acc tca      990
Asp Asp Gly Ile Val Tyr Ala Ser Leu Ala Leu Ser Ser Ser Thr Ser
245             250             255             260

ccc aga gca cct ccc agc cac cgt ccc ctc aag agc ccc cag aac gag     1038
Pro Arg Ala Pro Pro Ser His Arg Pro Leu Lys Ser Pro Gln Asn Glu
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acc ctg tac tct gtc tta aag gcc taaccaatgg acagccctct caagactgaa     1092
Thr Leu Tyr Ser Val Leu Lys Ala
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2

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Thr Leu Tyr Ser Val Leu Lys Ala
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Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly Gly Ser
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Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala Thr Ala
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Pro Asp Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly Gln Ser
                50                  55                  60

Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val Asn Arg
            65                  70                  75

Leu Phe Leu Asn Trp Thr Glu Gly Gln Lys Ser Gly Phe Leu Arg Ile
        80                  85                  90

Ser Asn Leu Gln Lys Gln Asp Gln Ser Val Tyr Phe Cys Arg Val Glu
        95                  100                 105

Leu Asp Thr Arg Ser Ser Gly Arg Gln Gln Trp Gln Ser Ile Glu Gly
110                 115                 120                 125

Thr Lys Leu Ser Ile Thr Gln Ala Val Thr Thr Thr Gln Arg Pro
                130                 135                 140

Ser Ser Met Thr Thr Thr Trp Arg Leu Ser Ser Thr Thr Thr Thr Thr
            145                 150                 155

Gly Leu Arg Val Thr Gln Gly Lys Arg Arg Ser Asp Ser Trp His Ile
        160                 165                 170
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3

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Ser Leu Glu Thr Ala Val Gly Val Ala Val Ala Val Thr Val Leu Gly
    175                 180             185
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Ile Met Ile Leu Gly Leu Ile Cys Leu Leu Arg Trp Arg Arg Arg Lys
190                 195             200                 205
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Gly Gln Gln Arg Thr Lys Ala Thr Thr Pro Ala Arg Glu Pro Phe Gln
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Asn Thr Glu Glu Pro Tyr Glu Asn Ile Arg Asn Glu Gly Gln Asn Thr
            225             230             235
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Asp Pro Lys Leu Asn Pro Lys Asp Asp Gly Ile Val Tyr Ala Ser Leu
        240             245             250
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Ala Leu Ser Ser Ser Thr Ser Pro Arg Ala Pro Pro Ser His Arg Pro
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aacaaggcc atg ggt cgg ccc ctg ctg ctg ccc cta ctg ccc ctg ctg ctg      171
          Met Gly Arg Pro Leu Leu Leu Pro Leu Leu Pro Leu Leu Leu
              -15             -10                 -5

ccg cca gca ttt ctg cag cct agt ggc tcc aca gga tct ggt cca agc        219
Pro Pro Ala Phe Leu Gln Pro Ser Gly Ser Thr Gly Ser Gly Pro Ser
        -1  1               5                   10

tac ctt tat ggg gtc act caa cca aaa cac ctc tca gcc tcc atg ggt        267
Tyr Leu Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly
    15              20                  25
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4

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ggc tct gtg gaa atc ccc ttc tcc ttc tat tac ccc tgg gag tta gcc        315
Gly Ser Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala
30              35              40                          45

aca gct ccc gac gtg aga ata tcc tgg aga cgg ggc cac ttc cac ggg        363
Thr Ala Pro Asp Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly
                50              55              60

cag tcc ttc tac agc aca agg ccg cct tcc att cac aag gat tat gtg        411
Gln Ser Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val
            65              70              75

aac cgg ctc ttt ctg aac tgg aca gag ggt cag aag agc ggc ttc ctc        459
Asn Arg Leu Phe Leu Asn Trp Thr Glu Gly Gln Lys Ser Gly Phe Leu
        80              85              90

agg atc tcc aac ctg cag aag cag gac cag tct gtg tat ttc tgc cga        507
Arg Ile Ser Asn Leu Gln Lys Gln Asp Gln Ser Val Tyr Phe Cys Arg
        95              100             105

gtt gag ctg gac aca cgg agc tca ggg agg cag cag tgg cag tcc atc        555
Val Glu Leu Asp Thr Arg Ser Ser Gly Arg Gln Gln Trp Gln Ser Ile
110             115             120             125

gag ggg acc aaa ctc tcc atc acc cag ggt cag cag cgg act aaa gcc        603
Glu Gly Thr Lys Leu Ser Ile Thr Gln Gly Gln Gln Arg Thr Lys Ala
                130             135             140

aca acc cca gcc agg gaa ccc ttc caa aac aca gag gag cca tat gag        651
Thr Thr Pro Ala Arg Glu Pro Phe Gln Asn Thr Glu Glu Pro Tyr Glu
            145             150             155

aat atc agg aat gaa gga caa aat aca gat ccc aag cta aat ccc aag        699
Asn Ile Arg Asn Glu Gly Gln Asn Thr Asp Pro Lys Leu Asn Pro Lys
        160             165             170

gat gac ggc atc gtc tat gct tcc ctt gcc ctc tcc agc tcc acc tca        747
Asp Asp Gly Ile Val Tyr Ala Ser Leu Ala Leu Ser Ser Ser Thr Ser
        175             180             185

ccc aga gca cct ccc agc cac cgt ccc ctc aag agc ccc cag aac gag        795
Pro Arg Ala Pro Pro Ser His Arg Pro Leu Lys Ser Pro Gln Asn Glu
190             195             200             205

acc ctg tac tct gtc tta aag gcc taaccaatgg acagccctct caagactgaa      849
Thr Leu Tyr Ser Val Leu Lys Ala
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Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly Gly Ser
                20              25              30

Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala Thr Ala
            35              40              45

Pro Asp Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly Gln Ser
            50              55              60

Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val Asn Arg
    65              70              75

Leu Phe Leu Asn Trp Thr Glu Gly Gln Lys Ser Gly Phe Leu Arg Ile
80              85              90                      95

Ser Asn Leu Gln Lys Gln Asp Gln Ser Val Tyr Phe Cys Arg Val Glu
            100             105             110

Leu Asp Thr Arg Ser Ser Gly Arg Gln Gln Trp Gln Ser Ile Glu Gly
            115             120             125

Thr Lys Leu Ser Ile Thr Gln Gly Gln Gln Arg Thr Lys Ala Thr Thr
            130             135             140

Pro Ala Arg Glu Pro Phe Gln Asn Thr Glu Glu Pro Tyr Glu Asn Ile
    145             150             155

Arg Asn Glu Gly Gln Asn Thr Asp Pro Lys Leu Asn Pro Lys Asp Asp
160             165             170             175

Gly Ile Val Tyr Ala Ser Leu Ala Leu Ser Ser Ser Thr Ser Pro Arg
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Ala Pro Pro Ser His Arg Pro Leu Lys Ser Pro Gln Asn Glu Thr Leu
            195             200             205

Tyr Ser Val Leu Lys Ala
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aggatctcga acctgcggaa ggaggaccag tctgtgtact tctgccaagt ccagctggac   240

atacagatca gggaggctgt cgtggcagtc catcaagggg acccacctca ccatcaccca   300

ggccctcagg cagcccctcc acagggcccc tctcctgcct ggacagctct gctggtctcc   360

ccgtcccctg gagaagaaca aggcc atg ggt cgg ccc ctg ctg ctg ccc ctg   412
                            Met Gly Arg Pro Leu Leu Leu Pro Leu
                                    -15   -10

ctg ctc ctg ctg cag ccg cca gca ttt ctg cag cct ggt ggc tcc aca   460
Leu Leu Leu Leu Gln Pro Pro Ala Phe Leu Gln Pro Gly Gly Ser Thr
                -5   -1 1   5

gga tct ggt cca agc tac ctt tat ggg gtc act caa cca aaa cac ctc   508
Gly Ser Gly Pro Ser Tyr Leu Tyr Gly Val Thr Gln Pro Lys His Leu
        10   15   20

tca gcc tcc atg ggt ggc tct gtg gaa atc ccc ttc tcc ttc tat tac   556
Ser Ala Ser Met Gly Gly Ser Val Glu Ile Pro Phe Ser Phe Tyr Tyr
25   30   35   40

ccc tgg gag tta gcc ata gtt ccc aac gtg aga ata tcc tgg aga cgg   604
Pro Trp Glu Leu Ala Ile Val Pro Asn Val Arg Ile Ser Trp Arg Arg
                45   50   55

ggc cac ttc cac ggg cag tcc ttc tac agc aca agg ccg cct tcc att   652
Gly His Phe His Gly Gln Ser Phe Tyr Ser Thr Arg Pro Pro Ser Ile
        60   65   70

cac aag gat tat gtg aac cgg ctc ttt ctg aac tgg aca gag ggt cag   700
His Lys Asp Tyr Val Asn Arg Leu Phe Leu Asn Trp Thr Glu Gly Gln
        75   80   85

gag agc ggc ttc ctc agg atc tca aac ctg cgg aag gag gac cag tct   748
Glu Ser Gly Phe Leu Arg Ile Ser Asn Leu Arg Lys Glu Asp Gln Ser
        90   95   100

gtg tat ttc tgc cga gtc gag ctg gac acc cgg aga tca ggg agg cag   796
Val Tyr Phe Cys Arg Val Glu Leu Asp Thr Arg Arg Ser Gly Arg Gln
105   110   115   120

cag ttg cag tcc atc aag ggg acc aaa ctc acc atc acc cag gct gtc   844
Gln Leu Gln Ser Ile Lys Gly Thr Lys Leu Thr Ile Thr Gln Ala Val
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aca acc acc acc acc tgg agg ccc agc agc aca acc acc ata gcc ggc   892

7

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Leu Arg Val Thr Glu Ser Lys Gly His Ser Glu Ser Trp His Leu Ser
            155                 160                 165

ctg gac act gcc atc agg gtt gca ttg gct gtc gct gtg ctc aaa act      988
Leu Asp Thr Ala Ile Arg Val Ala Leu Ala Val Ala Val Leu Lys Thr
            170                 175                 180

gtc att ttg gga ctg ctg tgc ctc ctc ctc ctg tgg tgg agg aga agg     1036
Val Ile Leu Gly Leu Leu Cys Leu Leu Leu Leu Trp Trp Arg Arg Arg
185                 190                 195                 200

aaa ggt agc agg gcg cca agc agt gac ttc tgaccaacag agtgtgggga       1086
Lys Gly Ser Arg Ala Pro Ser Ser Asp Phe
                205                 210

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ctcgttcccc attggcaaga tacatggaga gcaccctgag gacctttaaa aggcaaagcc   1206

gcaaggcaga aggaggctgg gtccctgaat caccgactgg aggagagtta cctacaagag   1266

ccttcatcca ggagcatcca cactgcaatg atataggaat gaggtctgaa ctccactgaa   1326

ttaaaccact ggcatttggg ggctgtttat tatagcagtg caaagagttc ctttatcctc   1386

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Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly Gly Ser
                20                  25                  30

Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala Ile Val
            35                  40                  45

Pro Asn Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly Gln Ser
        50                  55                  60

Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val Asn Arg
        65                  70                  75
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8

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Leu Phe Leu Asn Trp Thr Glu Gly Gln Glu Ser Gly Phe Leu Arg Ile
80                   85                  90                      95

Ser Asn Leu Arg Lys Glu Asp Gln Ser Val Tyr Phe Cys Arg Val Glu
                100                 105                 110

Leu Asp Thr Arg Arg Ser Gly Arg Gln Gln Leu Gln Ser Ile Lys Gly
                115                 120                 125

Thr Lys Leu Thr Ile Thr Gln Ala Val Thr Thr Thr Thr Thr Trp Arg
            130                 135                 140

Pro Ser Ser Thr Thr Thr Ile Ala Gly Leu Arg Val Thr Glu Ser Lys
        145                 150                 155

Gly His Ser Glu Ser Trp His Leu Ser Leu Asp Thr Ala Ile Arg Val
160                 165                 170                 175

Ala Leu Ala Val Ala Val Leu Lys Thr Val Ile Leu Gly Leu Leu Cys
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Ser Asp Phe
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aacaaggcc atg ggt cgg ccc ctg ctg ctg ccc cta ctg ccc ctg ctg ctg   171
          Met Gly Arg Pro Leu Leu Leu Pro Leu Leu Pro Leu Leu Leu
              -15             -10             -5
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9

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Pro Pro Ala Phe Leu Gln Pro Ser Gly Ser Thr Gly Ser Gly Pro Ser
        -1  1               5                   10

tac ctt tat ggg gtc act caa cca aaa cac ctc tca gcc tcc atg ggt    267
Tyr Leu Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly
        15              20                  25

ggc tct gtg gaa atc ccc ttc tcc ttc tat tac ccc tgg gag tta gcc    315
Gly Ser Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala
30                      35              40                      45

aca gct ccc gac gtg aga ata tcc tgg aga cgg ggc cac ttc cac ggg    363
Thr Ala Pro Asp Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly
                50                  55                  60

cag tcc ttc tac agc aca agg ccg cct tcc att cac aag gat tat gtg    411
Gln Ser Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val
            65                  70                  75

aac cgg ctc ttt ctg aac tgg aca gag ggt cag aag agc ggc ttc ctc    459
Asn Arg Leu Phe Leu Asn Trp Thr Glu Gly Gln Lys Ser Gly Phe Leu
            80                  85                  90

agg atc tcc aac ctg cag aag cag gac cag tct gtg tat ttc tgc cga    507
Arg Ile Ser Asn Leu Gln Lys Gln Asp Gln Ser Val Tyr Phe Cys Arg
        95                  100                 105

gtt gag ctg gac aca cgg agc tca ggg agg cag cag tgg cag tcc atc    555
Val Glu Leu Asp Thr Arg Ser Ser Gly Arg Gln Gln Trp Gln Ser Ile
110                     115                 120                 125

gag ggg acc aaa ctc tcc atc acc cag ggg aac cct tcc aaa aca cag    603
Glu Gly Thr Lys Leu Ser Ile Thr Gln Gly Asn Pro Ser Lys Thr Gln
                    130                 135                 140

agg agc cat atg aga ata tca gga atg aag gac aaa ata cag atc cca    651
Arg Ser His Met Arg Ile Ser Gly Met Lys Asp Lys Ile Gln Ile Pro
            145                 150                 155

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Ser

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ctgtactctg tcttaaaggc ctaaccaatg gacagccctc tcaagactga atggtgaggc   824

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Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly Gly Ser
                20              25                  30

Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala Thr Ala
            35              40              45

Pro Asp Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly Gln Ser
        50              55              60

Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val Asn Arg
    65              70              75

Leu Phe Leu Asn Trp Thr Glu Gly Gln Lys Ser Gly Phe Leu Arg Ile
80              85              90                  95

Ser Asn Leu Gln Lys Gln Asp Gln Ser Val Tyr Phe Cys Arg Val Glu
            100             105             110

Leu Asp Thr Arg Ser Ser Gly Arg Gln Gln Trp Gln Ser Ile Glu Gly
            115             120             125

Thr Lys Leu Ser Ile Thr Gln Gly Asn Pro Ser Lys Thr Gln Arg Ser
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His Met Arg Ile Ser Gly Met Lys Asp Lys Ile Gln Ile Pro Ser
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ataaaggaag tgctggtcac cctggaggtg tactggtttg gggaaggtcc ccggccccca     180
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cagccctctg gggagcctca ccctggctct ccccactcac ctcagccctc aggcagcccc      240

tccacaggac ccctctcctg cctggacagc tctgctggtc tccccgtccc ctggagaaga      300

acaaggcc atg ggt cgg ccc ctg ctg ctg ccc ctg ctg ctc ctg ctg cag      350
        Met Gly Arg Pro Leu Leu Leu Pro Leu Leu Leu Leu Leu Gln
        1               5                   10

ccg cca gca ttt ctg cag cct ggt ggc tcc aca gga tct ggt cca agc      398
Pro Pro Ala Phe Leu Gln Pro Gly Gly Ser Thr Gly Ser Gly Pro Ser
15                  20                  25                  30

tac ctt tat ggg gtc act caa cca aaa cac ctc tca gcc tcc atg ggt      446
Tyr Leu Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly
                35                  40                  45

ggc tct gtg gaa atc ccc ttc tcc ttc tat tac ccc tgg gag tta gcc      494
Gly Ser Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala
                50                  55                  60

aca gct ccc gac gtg aga ata tcc tgg aga cgg ggc cac ttc cac ggg      542
Thr Ala Pro Asp Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly
                65                  70                  75

cag tcc ttc tac agc aca agg ccg cct tcc att cac aag gat tat gtg      590
Gln Ser Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val
            80                  85                  90

aac cgg ctc ttt ctg aac tgg aca gag ggt cag gag agc ggc ttc ctc      638
Asn Arg Leu Phe Leu Asn Trp Thr Glu Gly Gln Glu Ser Gly Phe Leu
95                  100                 105                 110

agg atc tca aac ctg cgg aag gag gac cag tct gtg tat ttc tgc cga      686
Arg Ile Ser Asn Leu Arg Lys Glu Asp Gln Ser Val Tyr Phe Cys Arg
                115                 120                 125

gtc gag ctg gac acc cgg aga tca ggg agg cag cag ttg cag tcc atc      734
Val Glu Leu Asp Thr Arg Arg Ser Gly Arg Gln Gln Leu Gln Ser Ile
                130                 135                 140

aag ggg acc aaa ctc acc atc acc cag gct gtc aca acc acc acc acc      782
Lys Gly Thr Lys Leu Thr Ile Thr Gln Ala Val Thr Thr Thr Thr Thr
                145                 150                 155

tgg agg ccc agc agc aca acc acc ata gcc ggc ctc agg gtc aca gaa      830
Trp Arg Pro Ser Ser Thr Thr Thr Ile Ala Gly Leu Arg Val Thr Glu
            160                 165                 170

agc aaa ggg cac tca gaa tca tgg cac cta agt ctg gac act gcc atc      878
Ser Lys Gly His Ser Glu Ser Trp His Leu Ser Leu Asp Thr Ala Ile
175                 180                 185                 190

agg gtt gca ttg gct gtc gct gtg ctc aaa act gtc att ttg gga ctg      926
Arg Val Ala Leu Ala Val Ala Val Leu Lys Thr Val Ile Leu Gly Leu
                195                 200                 205

ctg tgc ctc ctc ctg tgg tgg agg aga agg aaa ggt agc agg gcg cca      974
Leu Cys Leu Leu Leu Trp Trp Arg Arg Arg Lys Gly Ser Arg Ala Pro
                210                 215                 220

agc agt gac ttc tgaccaacag agtgtgggga gaagggatgt gtattagccc         1026
Ser Ser Asp Phe
                225
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12

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cggaggacgt gatgtgagac ccgcttgtga gtcctccaca ctcgttcccc attggcaaga    1086

tacatggaga gcaccctgag gacctttaaa aggcaaagcc gcaaggcaga aggaggctgg    1146

gtccctgaat caccgactgg aggagagtta cctacaagag ccttcatcca ggagcatcca    1206

cactgcaatg atataggaat gaggtctgaa ctccactgaa ttaaaccact ggcatttggg    1266

ggctgttcat tatagcagtg caaagagttc ctttatcctc cccaaggatg gaaaatacaa    1326

tttattttgc ttaccataca cccctttttct cctcgtccac attttccaat ctgtatggtg    1386

gctgtcttct atggcagaag gttttgggga ataaatagcg tgaaatgctg ctgaaaaaaa    1446

aaaaaaaaaa aaa                                                       1459


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<212>   PRT
<213>   Homo sapiens

<400>   10

Met Gly Arg Pro Leu Leu Leu Pro Leu Leu Leu Leu Gln Pro Pro
1               5               10              15


Ala Phe Leu Gln Pro Gly Gly Ser Thr Gly Ser Gly Pro Ser Tyr Leu
            20              25              30


Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly Gly Ser
        35              40              45


Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala Thr Ala
    50              55              60


Pro Asp Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly Gln Ser
65              70              75              80


Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val Asn Arg
                85              90              95


Leu Phe Leu Asn Trp Thr Glu Gly Gln Glu Ser Gly Phe Leu Arg Ile
            100             105             110


Ser Asn Leu Arg Lys Glu Asp Gln Ser Val Tyr Phe Cys Arg Val Glu
        115             120             125


Leu Asp Thr Arg Arg Ser Gly Arg Gln Gln Leu Gln Ser Ile Lys Gly
    130             135             140


Thr Lys Leu Thr Ile Thr Gln Ala Val Thr Thr Thr Thr Trp Arg
145             150             155             160
```

13

```
Pro Ser Ser Thr Thr Thr Ile Ala Gly Leu Arg Val Thr Glu Ser Lys
            165                 170                 175

Gly His Ser Glu Ser Trp His Leu Ser Leu Asp Thr Ala Ile Arg Val
            180                 185                 190

Ala Leu Ala Val Ala Val Leu Lys Thr Val Ile Leu Gly Leu Leu Cys
        195                 200                 205

Leu Leu Leu Trp Trp Arg Arg Arg Lys Gly Ser Arg Ala Pro Ser Ser
    210                 215                 220

Asp Phe
225


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<400>  14
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Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1   5   10   15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser Ser Gly
              20   25   30

Ser Tyr Tyr Trp Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu
          35   40   45

Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Arg Ser
        50   55   60

His Lys Ser Arg Val Asn Ile Ser Val Asp Thr Ala Lys Asn Gln Phe
65   70   75   80

Ser Leu Lys Leu Ser Ser Val Ser Thr Ala Asp Thr Ala Val Tyr Tyr
              85   90   95

Cys Ala Arg Ile Thr Thr Thr Val Pro Ser Ser Trp Tyr Tyr Tyr Tyr
            100   105   110

Met Asp Val Trp Asp Lys Gly Thr Thr Val Thr Val Ser Ser
            115   120   125

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<213>   Homo sapiens

<400>   16

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1   5   10   15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Ser Ser Gly
              20   25   30

Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
          35   40   45

Ile Gly Ser Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu
        50   55   60

Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
65   70   75   80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
              85   90   95

Ala Arg Val Arg Arg Arg Tyr Ser Ser Ser Ala Ser Lys Ile Ile Phe

15

Gly Ser Gly Thr Arg Leu Ser Ile Arg
        115   120